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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/558,070

04/26/2000

Eishi Morimatsu

826.1603/JDH

9583

21171

7590

02/12/2004

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EXAMINER

DIEP, NHON THANH

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 02/12/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/558,070

Applicant(s)

MORIMATSU ET AL.

Examiner

Nhon T Diep

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 2,8-19,21-23 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,20 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

***Election/Restrictions***

1. Applicant's election without traverse of claims 1, 3-7, 20 and 24 in Paper No. 6, filed 1/21/2004 is acknowledged.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 6, 20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Naimpally (US 5,589,993).

Naimpally discloses a motion compensation video processing comprising the same moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising: a coding unit performing an intra-frame coding process or inter-frame coding process on given data; and an information amount reduction unit reducing an amount of information about given data wherein for a plurality of consecutive frames containing a first frame (fig. 3, el. 312-314 and further notice that image coding most if not all image frames are divided into macroblocks before coding), the coding unit performs the intra-frame coding process on each block, and the information amount about data coded by the coding unit; and for frames subsequent to the plurality of frames, the coding unit adaptively performs the intra-frame coding process or the inter-frame coding process on each block (Naimpally: col. 5, ln. 8-14 compresses low resolution video image using only

Art Unit: 2613

intra-frame coding technique meets the limitation of performs the intra-frame coding process **or** the inter-frame coding process on each block of frames subsequent to the plurality of frames) as specified in claims 1, 20 and 24; the information amount reduction unit reduces the amount of information in each block by lowering spatial resolution of an image in the plurality of frames (col. 10, ln. 27-40) as specified in claim 3; transform unit orthogonally transforming coded data obtained by the coding unit, wherein the information amount reduction unit outputs only data of a direct current element among data of frequency elements generated by the transform unit (transform unit orthogonal=DCT, col. 10, ln. 33-34 and col. 6, ln. 44-52) as specified in claims 6.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naimpally (US 5,589,993).

As applied to claims 1 and 6 above, it is noted that Naimpally does not particularly disclose an information amount adjustment unit stepwise increasing an amount of information in each block for frames subsequent to the plurality of frames from a state in which the information amount reduction unit has reduce the amount of information and the information amount adjustment unit stepwise raises the spatial resolution of an image in frames subsequent to the plurality of frames as specified in

Art Unit: 2613

claims 4-5; and the amount information adjustment unit stepwise extends a range of frequency of data of an AC element to be selected and outputted among data of frequency elements generated by the transform unit for frames subsequent to the plurality of frames as specified in claims 7.. Official Notice is taken with regard to the adjustment of quantization step size to control the output bandwidth of a encoding system and that since Naimpally further teaches that the circuitry may apply a combination of discrete cosine transformation, adaptive quantization, VLC and RLC, etc....(col. 10, ln. 27-41) and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to adaptively encode image signals by varying quantization step sizes to meet output demands, either to reduce (or to increase) the step size to increase (or to decrease) bandwidth outputs or to extend the range of frequency of data of an AC elements to be selected to meet coding requirement.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Canfield et al (US 5,825,424) discloses an MPEG system which decompresses and recompresses image data.

b. Wilkinson (US 5,812,194) discloses a motion compensated processing.

c. Boyce et al (6,023,553) discloses a methods and apparatus for achieving video data reduction through the use of re-encoding.

Art Unit: 2613

d. Rose et al (US 6,411,651) discloses a method and system for distributed video compression in personal computer architecture.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T Diep whose telephone number is 703-305-4648.

The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on 703 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703 87209314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-2600.

ND  
2/9/2004

  
**NHON DIEP**  
**PRIMARY EXAMINER**